

1      What is claimed is:

2      1. A thin type camera module comprising:

3            a fixing board;

4            an imaging-sensing semiconductor assembly comprising a COF (chip-on film) wiring

5            film and an image sensing chip, wherein the COF wiring film has a surface, a window

6            and a plurality of connecting ends disposed on the surface of the COF wiring film

7            around the window, the image sensing chip has a photosensitive surface

8            corresponding to the window, and a plurality of bumps are formed on peripherals of

9            the photosensitive surface, the image sensing chip is flip-chip mounted on the COF

10          wiring film to electrically connect the bumps with the connecting ends; and

11          a lens holder for connecting a camera lens, wherein the lens holder has a

12          light-pervious channel and is connected with the fixing board to form a airtight space

13          for sealing the image sensing chip, and the photosensitive surface of the image

14          sensing chip is corresponding to the light-pervious channel for capturing image.

15      2. The thin type camera module in accordance with claim 1, further comprising at least

16          an electric device electrically connected with the COF wiring film.

17      3. The thin type camera module in accordance with claim 2, wherein the electric device

18          is a passive component.

19      4. The thin type camera module in accordance with claim 2, wherein the COF wiring

20          film formed a module circuit electrically connecting the electric device.

21      5. The thin type camera module in accordance with claim 4, wherein the module circuit

22          is formed on an extending surface of the COF wiring film without being covered by

23          the lens holder.

24      6. The thin type camera module in accordance with claim 1, further comporising a

25          sealant layer is formed around the window of the COF wiring film for enclosing the

26          bumps of the image sensing chip.

27      7. The thin type camera module in accordance with claim 6, wherein the sealant layer is

1       an anisotropic conductive film (ACF).

2       8. The thin type camera module in accordance with claim 6, wherein the sealant layer is

3       a non-conductive film (NCF).

4       9. The thin type camera module in accordance with claim 6, wherein the sealant layer is

5       transparent thermosetting compound.

6       10. The thin type camera module in accordance with claim 1, wherein the COF wiring

7       film has at least a conductive via electrically connecting the connecting ends.

8       11. The thin type camera module in accordance with claim 1, wherein the lens holder

9       comprises a filter aligning with the light-pervious channel.

10      12. The thin type camera module in accordance with claim 1, further comprising a

11      camera lens connected with the lens holder.

12      13. The thin type camera module in accordance with claim 1, wherein the fixing board

13      has a recession for locating the image sensing chip.

14      14. The thin type camera module in accordance with claim 1, wherein the airtight space is

15      in vacuum state.

16      15. The thin type camera module in accordance with claim 1, wherein the airtight space

17      filled with inert gas.

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